### Urban Small Farms Conference 2019

**Wednesday, February 20th, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Cut Flowers</th>
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</thead>
<tbody>
<tr>
<td>1:00</td>
<td><strong>Introduction to the Cut Flower Session</strong>&lt;br&gt;Melanie Stock, USU</td>
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<td></td>
<td><strong>pg. 80</strong></td>
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<tr>
<td>1:30</td>
<td><strong>Growing Flowers for Floral Designs</strong>&lt;br&gt;Donna Minch, USU</td>
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<td><strong>pg. 83</strong></td>
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<td>2:00</td>
<td><strong>IPM for Cut Flowers</strong>&lt;br&gt;Marion Murray, USU</td>
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<td><strong>pg. 88</strong></td>
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<td><strong>2:30 - 3:00 Break</strong></td>
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<td>3:00</td>
<td><strong>Experiences and Perspectives From a Small-Acreage Cut Flower Grower</strong>&lt;br&gt;Tiffany Maughan, USU</td>
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<td>3:30</td>
<td><strong>USU Research on Cut Flowers</strong>&lt;br&gt;Maegen Lewis, USU</td>
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<td>4:00</td>
<td><strong>Economics: Going from Hobbie to Business and Setting Prices</strong>&lt;br&gt;Ruby Ward</td>
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<td><strong>pg. 97</strong></td>
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<td>4:30</td>
<td><strong>Establishing Cut Flower Networks in Utah</strong>&lt;br&gt;Melanie Stock, USU</td>
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Click on the session you would like to view and it will take you there!
Introduction to the Cut Flowers Session and Programs at USU

USU is developing a cut flower program and this presentation kicks off our initiative to serve flower farmers across Utah. Topics will include a background of the program, current and upcoming research trials, assessing needs for future success, and grower collaboration opportunities/feedback.

Melanie N Stock
Assistant Professor
Utah State University
melanie.stock@usu.edu

I am a new assistant professor in the USU Plants, Soils, and Climate Department. I moved to Utah from Wisconsin in 2018. My background is in using soil science for manure and land management in the wintertime, and running community gardens. At USU, I am excited to work on resource use efficiency and high value crops with small scale producers. I am particularly excited to begin cut flower research and Extension programming.
Introduction to the Cut Flowers Session & USU Programs

Cut Flowers Track

Dr. Melanie Stock
Assistant Professor / Extension Urban & Small Farms Specialist
Department of Plants, Soils, and Climate, Utah State University
Certified Soil Scientist, SSSA

7th Annual Urban & Small Farms Conference
Utah Cultural Celebration Center – West Valley City, UT
February 20, 2019
Today’s Topics

I. Welcome!
   • Who I am
   • Background to USU cut flowers programs/Utah’s uniqueness
   • Upcoming studies

II. Survey

III. Q & A
Who I am

• Assistant Professor / Extension Urban & Small Farms Specialist
• My appointment is 70% Extension and 30% Research
• Background: soil physics and winter agriculture, manure nutrient management, and community gardens

University of Wisconsin: PhD Soil Science, Minor: Geological Engineering
Need for Cut Flower Programming in Utah

• Viable crop for small farms/diversification
• Clear desire for resources...most of which only exist out-of-state
• Example: 2018 Utah scholarship applicants for the Floret Online Workshop (small-scale flower farming course from private farm in WA state).

(Image adapted from floretflowers.com)
Utah has unique growing conditions compared to traditional flower hubs, most of US

<table>
<thead>
<tr>
<th></th>
<th>Coasts, Midwest</th>
<th>Utah, Intermountain West</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature</strong></td>
<td>Mild</td>
<td>Strong fluctuations</td>
</tr>
<tr>
<td></td>
<td>Relatively constant – daily, year-round, spatially</td>
<td>Great temperature range – daily, year-round, spatially</td>
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<tr>
<td></td>
<td>Microclimate not pronounced</td>
<td>Microclimate very pronounced</td>
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<tr>
<td></td>
<td>First frost?</td>
<td>First frost?</td>
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<tr>
<td><strong>Humidity</strong></td>
<td>Humid</td>
<td>Semi-arid</td>
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<tr>
<td><strong>Elevation</strong></td>
<td>Low elevation</td>
<td>High elevation</td>
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<tr>
<td></td>
<td>Cloudy</td>
<td>Intense light</td>
</tr>
<tr>
<td><strong>Soil</strong></td>
<td>Acidic pH (&lt; 7)</td>
<td>Alkaline pH (8+)</td>
</tr>
<tr>
<td></td>
<td>High organic matter (5-10%)</td>
<td>Low organic matter (&lt; 2%)</td>
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<tr>
<td></td>
<td>Leaches nutrients</td>
<td>Accumulates nutrients</td>
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<tr>
<td></td>
<td>Salinity is not generally a concern (or thought)</td>
<td>Salinity is a major concern</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>More Neutral</td>
<td>Alkaline</td>
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</table>
Example: Weather

Mount Vernon, WA

SLC, UT
Example: Soil
This means we have many research, outreach, and collaborative opportunities!
I. Advancing Peony for early-season markets

- Research focused on winter chilling in warm places – no info on warming for cold places, like Utah
- Tunnels successfully advance fruits and vegetables. Now to flowers - we are testing outdoor, high tunnel, low tunnel, and soil heat mats
II. Nutrient Management - Dahlia

- Soil fertility is one of the most commonly misunderstood concepts and can lead to long term soil sustainability challenges
- Dahlia are particularly sensitive to soil fertility
- UT soils are particularly sensitive to soil fertility
- Reliable information is
- Testing Dahlia, Café au Lait
III. Urban Irrigation Scheduling

- Day versus night irrigation: water savings and crop quality?
- Urban water districts balance conservation practices with demand
- Developing “crop coefficients” for cut flowers
- Testing Zinnia ‘Benary’s Giant’
IV. Future – Planting Bulbs in Fall vs. Spring

• ‘Tender’ bulbs recommended for spring planting
• Growers find fall works better – why?
  • Winters are milder than represented by USDA Plant Hardiness Zones?
  • Bulbs are not fully tested for winter tolerance?
  • Light intensity at high elevation demands fall planting?
(More on) Future Research

• I am here to help - let’s work together.
• Grower input! You will always know better than me...
  • Key cultivation, seasonal challenges faced by growers
  • Which flowers are most popular that we should trial in Utah
• Grower needs assessments supply key data for grant writing
Poll Questions
1) What is the size of your operation?

a. <0.25 acre
b. 0.25-0.50 acres
c. 0.6-1 acres
d. 2-5 acres
e. >5 acres
f. I don’t have a cut flower operation
2) How long have you been operating your cut flower farm and business?

a. <1 year
b. 1-2 years
c. 3-4 years
d. >5 years
e. I don’t operate a cut flower farm, but I would like to one day
f. I don’t operate a cut flower farm and I don’t plan to start
3) What is your main cut flower crop?
4) Do you use season extender techniques?
   a. Yes
   b. No, and I don’t plan to
   c. No, but I would like to if I had more information
5) What management issue is your highest priority?
   a. Timing seeding/planting and harvest for markets
   b. Plant nutrient management and yield
   c. Shading techniques
   d. Season extenders
   e. Irrigation
   f. Marketing
   g. Pests and disease
6) Which management issue is your second-highest priority?

a. Timing seeding/planting and harvest for markets
b. Plant nutrient management and yield
c. Shading techniques
d. Season extenders
e. Irrigation
f. Marketing
g. Pests and disease
7) What is the biggest challenge with finding cut flower cultivation information?

a. There is not much out there
b. There is too much out there and I can’t find what I need
c. The existing information is from out-of-state and not geared to my conditions in Utah
d. I’m not sure where to look
8) I prefer receiving cut flower information (grow guides, tips, trends) from:

a. Social Media
b. Websites
c. Books
d. Presentations/Workshops
e. Other farmers
9) If you had to pick one, what is your favorite form of social media for getting information and updates?

a. Facebook
b. Instagram
c. Twitter
d. Other: _________________________________
Thank you for attending!

Questions for me?

Dr. Melanie Stock
Assistant Professor / Urban & Small Farms Extension Specialist
Email: melanie.stock@usu.edu
Phone: 435-797-0248
Growing Flowers for Floral Design

Open discussion of what types of flowers would be best to grow, that can be marketed to designers. Other methods of direct marketing flowers in simple designs.

**Donna Minch**  
Adjunct Instructor  
Utah State University  
donna.minch@usu.edu

From a young age, Donna was always a flower child. She has worked in floral design for almost 50 years. A graduate of Ritner's School of Floral Design in Boston with a BS degree in Plant Science from Utah State University. She recently retired after 23 years from USU as a horticulturist, program coordinator for the PSC department regional campus degrees & student advisor. Donna continues to teach in the off campus program & does floral design at home & on the road.
List: Cut flowers for sale: * favorites

These flowers fit the bill for cut flowers to sell: 5-6 day minimum vase life, long growing cycle, some with multiple stems for weekly cutting and strong stems.

*Ageratum: Clusters of long-lasting flowers in red, white and blue add color to bouquets. With successive plantings, ageratum can produce continuous blooms from early summer to frost. Focus on the blue.

Amaranth: Love lies bleeding: pendulous blooms, nice foliage

Bachelor Buttons: grows one to three feet tall with innumerable fluffy but trim round flowers held above the rather sparse, long and narrow gray-green leaves.

*Celosia: plume: annual flower whose silky blooms get attention wherever they grow with a wide choice of appearance, size, and color. Large flower clusters on top of green or reddish leaves. ... Heights range from 6 to 36 inches

*Dahlia: a diverse annual flower, from huge, dinner-plate-size blooms to midget pompons only two inches in diameter. Grow from one to five feet tall. ... The flowers are carried on long stems above the erect plants.

Delphinium: Flowers are 2.5 cm across, arranged on a long spike measuring 20-40cm in length. There are also branching types with several flower spikes on one plant. Stems could be as long as 100 cm. Variety of different colors.

*Gomphrena: globosa, globe amaranth, is an edible plant from the family Amaranthaceae. The round-shaped flower inflorescences are a visually dominant feature. shades of magenta, purple, red, orange, white, pink, and lilac. Dry well.

*Gypsophila: Commonly called Gypsophilia or Baby's Breath. Many tiny flowers are produced on branched stems giving a lacy, snowflake appearance. Baby's Breath comes in pink and white. Great filler for bouquets.

*Larkspur: This relative of the buttercup has complex flowers and comes in a wide range of colors. Most seed suppliers offer color assortments, so you’ll have a rainbow of blooms to harvest and mix into bouquets.
**Lisianthus:** Single-flowered Lisianthus have showy, cup-shaped tulip like flowers, and double-flowered varieties are often mistaken, for garden roses. Doubles are the top sellers. Used in wedding work & arrangements.

*Marigold:* Flowers are made up of multiple layers of overlapping petals with the petals getting smaller and more condensed towards the flowers center. The blooms may be single or double colored, varying hues of yellow, orange, red, and maroon.

**Salvia.** Produces an abundance of flowers on its elongated stems. Many variety choices for a wide choice of colors, from scarlet to white.

*Scabiosa:* Pincushion flower, scabiosa is excellent for cutting, comes in a wide variety of colors, from white to dark. As with most cut flowers, plant every 2-3 weeks until mid-summer for extended bloom harvest.

**Snapdragon:** Best to start indoors and transplant. Snapdragons take 120 days to mature. Most growers plant a mix of 8-10 colors for variety.

**Statice:** Displays multiple branches of tiny funnel-shaped flowers. Statice's versatility and hardiness make it an ideal flower for arranging! Dries well.

*Sunflowers.* The early-blooming varieties – at under 60 days to harvest – are popular market sellers.

*Verbena bonariensis.* This popular flower produces lilac colored flowers on long, thin stems. Good filler.

**Yarrow.** Also called Achillea millefolium, this popular annual comes in a variety of colors. It can be direct seeded or transplanted, and is ready to harvest in around 90 days.

*Zinnias.* Nothing fills out a bouquet quite like zinnias, with their brilliant colors, shapes and sizes. The giant varieties are bestsellers at the market.

**Bulbs**

**Alium:** single round blooms on leafless stems. Shades of lavender to purple, small to larger blooms.
**Gladiolus:** Common names include "glads" and "sword lilies", which refers to its leaves which are long, thin and pointed. Multiple blooms up the stem.

**Asiatic Lilies:** As a cut flower, Lilies are simply wonderful. There are more than 110 species in the Lily Family. Lilies are large flowers, you will find them with six petals, often fragrant, with a range of colors like white, yellow, orange & more!

**Perennial:**

**Liatrus:** Liatris is noted for attracting butterflies. Lavender to Purple feathery flowers on a spike like stem. Good to give height to a bouquet.

**Limonium:** Names used in the trade for various species include misty, Latifolia, sea foam and Caspia. Good filler flower for bouquets.

**Peony:** With hundreds of varieties of this popular perennial, the hardest decision may be which ones to plant! The large fragrant flowers are always a hit at the Saturday market & with florists for weddings.

**Shrubs**

**Hydrangea:** Limelight is a species called Hydrangea paniculata. The leaves are smaller, but the quantity of flowers is incredible. The 6- to 12-inch-long flower heads are held upright on the plant. The flowers start off a chartreuse lime then change to bright, light lime that is almost white. As fall approaches, the flowers start turning pink.

**Hydrangea Macrophylla** Choose a variety that also dries well.

**Lavendar:** plants are small, branching and spreading shrubs with grey-green leaves and long flowering shoots. Cut for fresh bouquets or make wreaths & dry.

**Lilac:** fragrant panicle blooms: here's a good article to read: [https://www.growingformarket.com/articles/lilacs-cut-flowers](https://www.growingformarket.com/articles/lilacs-cut-flowers)
Growing cut flowers to sell:

Where to market:

Farmer’s markets: consider sharing a booth with another vendor: Make mixed bouquets in advance & at the market.

Florists: Contact local florists, ask what flowers they may be interested in buying, let them know what you can offer. Take orders or have a flower truck.


U-cut operation: more of an agritourism approach

Subscription sales: bring bouquets to offices or like CSA

Where not to market:

Chain Grocery stores: normally have their own suppliers

Wholesale florists: They can only pay you half of what they sell the product for. Better to sell direct to consumer or florists. * with the exception of blooming branches.

Some articles you may want to read:

https://www.growertalks.com/Article/?articleid=18373 hydrangeas

Book:

An American Cutting Garden: A Primer for Growing Cut Flowers Where Summers are Hot and Winters are Cold Suzanne McIntire
IPM for Cut Flowers

Learn about overall management practices to reduce pest problems in cut flower production of annuals and perennials.

Marion Murray
IPM Project Leader
Utah State University
marion.murray@usu.edu

Marion has been the IPM Project Leader at Utah State University Extension, Logan, since 2006. She conducts outreach and research in IPM, with a focus on fruits and landscape ornamentals. She received her MS in plant pathology from Oregon State University and is originally from North Carolina.
Experiences and Perspectives from a Small-Acreage Cut Flower Grower

I will be sharing lessons learned as I launched a cut flower business in Cache Valley Utah. I will discuss farm planning, labor, harvest, and markets.

Tiffany Maughan
USU Extension Research Associate
Utah State University Extension
tiff.maughan@gmail.com

Tiffany is an extension research associate for Utah State University. Her work primarily includes composing fruit, vegetable, and flower fact sheets, collaborating on horticultural research projects, and maintaining the Production Horticulture website. She is also the owner of a small cut flower farm, Hammock & Spade Flowers. Tiffany graduated from USU with a B.S. in horticulture in 2012 and a M.S. in plant science in 2013.
Experiences of a Cut Flower Grower

Hammock & Spade Flowers
Tiffany Maughan
Introduction

- Farm in Mendon (Cache Valley), UT
- Growing space 5000 sq ft
- Two years
- Full time stay-at-home mom
- Part time USU Extension Research Associate
Cut Flower Markets I Explored

• Direct Sales
  • Community
• Road Side Stand
  • Staffed booth
  • On your honor
• Farmer’s Market
Cut Flower Markets I Explored

- Weddings/Events
- Wholesale
  - By-the-bucket
  - Florists
Holiday Markets

• May Day: Flower Crowns
• Mother’s Day
• Memorial Day
• July 4
• July 24
• Back to School
Planning: What to Plant

• Use winter months to plan
• Color themes
  • Trends
  • Spring, Summer, Fall
Planning: What to Plant

- Type of Bloom
  - Filler
  - Focus Blooms
    - Disk, Spike
  - Textures
Planning: When to Plant

• Production windows
  • Hard to define at first
  • Keep Records!
    • Pictures
    • Farm notebook
• Succession Plantings
### Planning: When to Plant

- **Seeding Schedule**
- **Expected Harvest window**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Due</th>
<th>Estimated Weed planted</th>
<th>Weeks to crop</th>
<th>Transplant</th>
<th>Cond. Start</th>
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<tr>
<td>Ammi, Green Mist</td>
<td>D</td>
<td>3/2/2018</td>
<td>7</td>
<td>4/20/2018</td>
<td>4/13/2018</td>
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<tr>
<td>Ammi, Dara</td>
<td>D</td>
<td>3/2/2018</td>
<td>7</td>
<td>4/20/2018</td>
<td>4/13/2018</td>
</tr>
<tr>
<td>Iceland Poppy, Sherbert Mix</td>
<td>D</td>
<td>2/9/2018</td>
<td>10</td>
<td>4/20/2018</td>
<td>4/13/2018</td>
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<tr>
<td>Celosia, Plume Mix</td>
<td>D</td>
<td>4/5/2018</td>
<td>5</td>
<td>5/10/2018</td>
<td>5/3/2018</td>
</tr>
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</table>
Annual vs. Perennial

**Annual**
- Low up-front cost
- Must replant each year
- Harvest 1\textsuperscript{st} (and only) year

**Perennial**
- High up-front cost
- Last many years
- Typically wait 2-5 years to harvest
Production

• Transplants
  • Grew my own
    • Lower Cost
    • Increased Variety
  • Contract with Nursery

• Direct Seed
  • Varied Success
Production

• Soil Prep
  • Cover crop
  • Compost
  • Fall Leaves
Production

• Black Plastic
  • Weed suppression
  • Soil warming
  • Water use efficiency
  • Installation

• Drip Irrigation
Production

• Trellis
  • Crop dependent
  • Inexpensive
    • Compared to a ruined crop
Harvest

- Time of Day
- Tools
  - Hand Clippers
- Buckets
- Preservative
- Move to cool ASAP
Harvest

- Prepping
  - Market Dependent
  - My least favorite
  - Time Consuming

- Sorting
- Cleaning Stems
  - Searing
- Bundling
  - Florists: groups of 10 usually
Pests

• Grasshoppers
  • Bowed to their glory

• Aphids
  • Natural Predators

• Deer
  • Prayer

• Mites
  • Sprayed with water

• Caterpillar
  • Hand removal
Dried Flowers

- Tried to dry every extra flower
- Fall/Winter Wreaths
- Wall Hangings
- Driable Bouquets
My Favorites

• Top 10 Focus Blooms
  • Cosmos, Double Click Mix
  • Cosmos, Cupcakes
  • Dahlia, Castle Drive (early bloom)
  • Dahlia, Moore Place (early bloom)
  • Delphinium, Belladonna Mix
  • Scabiosa, Black Knight
  • Snapdragon, Madame Butterfly
  • Stock, Quartet Mix
  • Strawflower, Sultain Mix
  • Zinnia, Benary’s Giant Mix

• Favorite Fillers
  • Amaranthus, Red Spike
  • Cress, Persian Cress
  • Dusty Miller, New Look
  • Euphorbia, Mountain Snow
  • Statice, Seeker White
Conclusions

• Proper planning pays off
• Do market research
• It’s a ton of work
• Very rewarding
USU cut flower research has been focused on snapdragon and sweet pea production using high tunnel systems. Several cultivars have been trialed at various planting dates to develop crop production guidelines for growers. High tunnels have shown to extend the harvest window and improve stem quality when compared to field grown flowers. Several other perennial and annual crops are beginning to be evaluated for their potential as cut flowers.

Maegen Lewis
Undergraduate Researcher
Utah State University
maegenlewis@hotmail.com

I am a student at USU working towards a bachelors degree in plant science. My undergraduate research has involved the development of crop management guidelines for high tunnel grown cut flowers.
UTAH STATE UNIVERSITY
HIGH TUNNEL CUT FLOWER RESEARCH

Maegen Lewis
Undergraduate Researcher
Utah State University
PURPOSE OF THIS WORK

1. Development of crop production guidelines specifically for Utah growers
2. Determine the value of high tunnels in cut flower production
3. Evaluate the economic feasibility of cut flowers crops
WHAT ARE HIGH TUNNELS?

Simple structures
- Passive heating and cooling systems
- Extension of production window
- Improvement of crop quality

Passive temperature management
- **Heating** – capturing solar energy in sealed high tunnel
  - low tunnels
- **Cooling** – need for ventilation during warmer temperatures, shading for cooling during warmer seasons
  - ventilation and replacing plastic with shade
Representative cool season crops

• Tolerate light frosts
• Thrive in cooler temperatures
• High tunnels moderate the high temperature variations in Utah

Snapdragon

Antirrhinum majus

‘Chantilly’, ‘Potomac’ and ‘Animation’

Sweet pea

Lathyrus odoratus

‘Mammoth’, ‘Elegance’ and ‘Spencer’
SNAPDRAGON – LAYOUT AND HARVESTING METHODS

**Layout**
- 6 replicate plots/cultivar/planting date
- horizontal trellis for support
- low tunnels for frost protection
- plastic changed to shading – May 29

**Harvesting** – 3 days/week
- According to USDA grading standards
- Cull (unmarketable less than 18”)
- Marketable (18”+)

**High tunnel** – planting dates
- 9 Feb., 9 Mar., 23 Mar., 12 April

**Field** – planting dates
- 23 April, 21 May
SNAPDRAGON - HIGH TUNNEL AND FIELD COMPARISON

![Graph showing average stems harvested per plot compared between High Tunnel and Field.](image)

![Bar chart comparing stems harvested per linear foot in different size categories: cull, 18-23 in., 24-29 in., 30-35 in., >36 in.](image)
Delayed blooming of first planting date
- Delayed by cool temperatures

Low marketability of final planting date
- Unfavorably warm temperatures

Blooming date variation between cultivars
- ‘Chantilly’ group 1-2
- ‘Potomac’ group 3-4

Significant improvement over last years’ trials
SWEET PEA - LAYOUT AND HARVESTING METHODS

Layout
- 4 replicate plots/cultivar
- Plastic replaced with shade March 1

Harvesting
- Harvested M-F
- Graded by florist standards
- Cull (less than 8”) marketable (8”+)

High tunnel
- Planted Feb. 27
Field
- Planted April 21
• Production began 4 weeks earlier in the high tunnel than the field

• High tunnel yields were 2.6 times higher than in the field
SWEET PEA - HIGH TUNNEL AND CULTIVAR PRELIMINARY TRIALS

- Increase in culls mid July due to excessive heat and insect damage
- High cull percentage for all cultivars
- Significant improvement to last years trial’s – earlier planting date
High tunnel peonies began blooming 4 weeks earlier than the field peonies.

![Graph showing high tunnel and field peony harvest per day]

- **Marketable stems harvested per day**
- **High tunnel**
- **Field**
- **30-Apr**
- **7-May**
- **14-May**
- **21-May**
- **28-May**
- **Mother’s Day**
- **Memorial Day**
## EXCITING PRELIMINARY TRIAL CROPS

<table>
<thead>
<tr>
<th>Campanula</th>
<th>Cosmos</th>
<th>Stock</th>
<th>Peony</th>
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<tbody>
<tr>
<td>‘Champion’</td>
<td>‘Double-click’</td>
<td>‘Katz’</td>
<td>‘Coral Charm’</td>
</tr>
<tr>
<td>‘Campana’</td>
<td></td>
<td>‘Iron’</td>
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<td></td>
<td></td>
<td>‘Noble’</td>
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<tr>
<td>Celosia</td>
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<td>‘Pampas plume’</td>
<td>‘Cannes’</td>
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<td>‘Cramers Hi-Z’</td>
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<tr>
<td>‘Chief’</td>
<td>‘QIS mix’</td>
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<td>‘Bombay’</td>
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<td>‘Doublini’</td>
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<td></td>
<td>‘Mariachi’</td>
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<td></td>
<td>‘Rosanne’</td>
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<td>‘Rosita’</td>
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<td>Zinnia</td>
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<tr>
<td>‘Benary’s Giant Dahlia’</td>
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<tr>
<td>‘Cupcakes’</td>
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<tr>
<td>‘Dahlia’</td>
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<tr>
<td>‘Oklahoma’</td>
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<tr>
<td>‘State Fair’</td>
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</tbody>
</table>
THANK YOU

Questions?
Economics: Going from Hobbyist to Business and Setting Prices

When you have a business a price needs to be something that will not only cover your costs and allow you to make a profit, it also must be something people are willing to pay. This session will not tell you what price you should charge. Instead it will show you how to examine your situation and set prices based upon your costs and market. It will also show how making mistakes in pricing your product may not only affect your individual business, but also how customers may view local cut flowers.

Ruby Ward
Professor, Economic Extension Specialist
Utah State University
Ruby.ward@usu.edu

Dr. Ruby Ward was raised on a farm and ranch in South-eastern Idaho. From Texas A&M University she received an MBA and a PhD in Agricultural Economics. Dr. Ward is a professor in the Department of Applied Economics at Utah State University. She teaches agricultural finance and community planning. Dr. Ward has delivered educational programs in Utah and the surrounding region for the last 18 years. Ward currently co-chairs the Urban and Small Farms Conference in Utah. Ward is the project leader for the Rural Tax Education website (RuralTax.org) and Co-chair of the National Farm Income Tax Extension Committee.
Economics: Going From Hobbyist to Business and Setting Prices

Ruby Ward
Utah State University
Session Overview

- What is your competition?
- Where do you want to be positioned?
- What does it cost?
  - Variable Vs. Fixed
- What is your margin?
Where do You Want to Be Positioned?

- Lowest Cost Alternative
- Value for Money
- Luxury Item
- Higher Quality
- Special Occasion vs. Frequent Purchase
What is Your Competition?

- What else can customers buy instead of your product?
- What does it cost?
Commodity

Or

Niche
Commodity
- Price will go to just cover costs

Niche
- Requires more marketing
- Price can have a premium
What does It Cost?

- Variable Costs – Varies with amount of production (seed, fertilizer, etc.)
- Fixed Costs – Set amount no matter how much to produce (rent, tractor, etc.)
- Sunk Costs – Already been spent or sunk.
- One time purchase that is not to your normal market
- Anything above sunk cost

- Normal Market
  - Value established over time
  - Need to cover all costs

- New product or market
  - Educate the customer
  - Set their expectations
Does One Person Selling at Farmers Market Affect Others?
## What does It Cost?

### What Should the Price Be?

<table>
<thead>
<tr>
<th>½ Acre CSA Shares</th>
<th>Total</th>
<th>Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inputs</td>
<td>$1,145</td>
<td>$115</td>
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<tr>
<td>Fixed Costs</td>
<td>$550</td>
<td>$55</td>
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<tr>
<td><strong>Total Cost</strong></td>
<td><strong>$1,695</strong></td>
<td><strong>$170</strong></td>
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### LABOR!!!!

<table>
<thead>
<tr>
<th>½ Acre CSA Shares</th>
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<tr>
<td>Fixed Costs</td>
<td>$550</td>
<td>$55</td>
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<td>Labor</td>
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<td>$446</td>
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<tr>
<td>Total Cost</td>
<td>$6,155</td>
<td>$615</td>
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</table>
Articles on Flash Drives

- Conducting Market Assessment
- Estimating Market Size and Price for Fresh Produce Sales
- Fresh Produce Direct Market Sales Considerations
  - Tips for selling at farmers market
- Target Market Identification and Data Collection Methods
Establishing Cut Flower Networks in Utah

Many specialty crop farmers establish associations to network, coordinate business, and collaborate on education and research opportunities with the University. This presentation will discuss these options for cut flower growers. We will focus on end-user feedback to gauge interest, discuss logistics, and plan for next steps.

Melanie N Stock
Assistant Professor
Utah State University
melanie.stock@usu.edu

I am a new assistant professor in the USU Plants, Soils, and Climate Department. I moved to Utah from Wisconsin in 2018. My background is in using soil science for manure and land management in the wintertime, and running community gardens. At USU, I am excited to work on resource use efficiency and high value crops with small scale producers. I am particularly excited to begin cut flower research and Extension programming.
Establishing Cut Flower Networks in Utah

Cut Flowers Track

(Dr. Melanie Stock and) Company...
Assistant Professor / Extension Urban & Small Farms Specialist
Department of Plants, Soils, and Climate, Utah State University
Certified Soil Scientist, SSSA

7th Annual Urban & Small Farms Conference
Utah Cultural Celebration Center – West Valley City, UT
February 20, 2019
Today’s Topics – A starting point for Discussion

I. Developing a Growers Association
   • Background
   • Reasons

II. Recent Progress

III. Updates from growers?
Reasons for an Association

• To support flower farmers through education, business opportunities, helping them reach their ideal customer

• Bring awareness of Slow Flowers to the local customer.
  • Make it just as popular and well known as Slow Food.
  • Possible coop opportunities
  • This support sales, increases customers, and sustainability

• Make it easy for people to find a flower farm to buy from.

• Efficient way to communicate with and between farmers

• Increase USU interface: research collaborations, grant opportunities, field days, farm tours
Name & Logo

• Utah Flower Farm Association
• Logo by Heather Griffiths, Wasatch Blooms
• Something simple like Utah Berry Growers Association
First Meeting

- In attendance: Heather Griffiths, Lindsey Waddoups, Shelly Zollinger, Fawn Rueckert, and Melanie Stock

- Defined Action Steps:
  - Mission statement
  - Membership
  - Bylaws
  - Establishment of nonprofit
  - Start website
  - Recruitment of farmers, then outreach to consumers
Mission Statement

Our mission is to promote local and sustainable floriculture by supporting local flower farms through education, outreach, and research programs. We also focus on educating flower lovers of the economic and environmental impact of local flowers, as well as the diversity of flowers available through Utah Flower Farms.
Membership and Fees

• Discussed two-tier system, but will focus on professionals at this time
  • Home Growers track
  • **Professional track**

• Professional Growers only, some possible requirements
  • business license
  • grown for profit
  • presently own a farm for cuts
  • written application and fees
  • approved by a committee
  • agrees to the bylaws of the association
Example Membership: Alaska Peony Coop

• Membership is held one per farm or farming entity, and each membership is entitled to one (1) vote. Individuals, organizations or entities that own more than one farm shall have one (1) vote.

• All members are co-owners of the APC.

• Membership investment must be fully paid to be considered a member in good standing.

• Dues are established by the membership at the request of the Board of Directors. Annual dues must be fully paid to use APC services. Current dues are $100.

An individual one-time membership fee is US $750 and is non-refundable. If annual dues are implemented for any given year, dues payment will be required by January 31st or the member will be considered as not in good standing.
Example Terms of Membership:

alaskapeonycooperative.com/join_alaska_peony_cooperative.html

1. I agree to comply with this Membership Agreement and with, as they currently exist or are later adopted or amended, the APC: (a) Articles of Incorporation; (b) Bylaws; (c) Policies; (d) rate or price schedules; (e) Operational Plan; (f) Risk Management Plan; and (g) rules, regulations, and actions adopted, taken, or approved by the Board of Directors (a through g, collectively, are the "Governing Documents"), all of which constitute a contract between the APC and its members. I may view the current Bylaws on the APC website at www.alaskapeonycooperative.com, or I may request that the Board of Directors email a current copy to me.

2. I understand that APC will set standards in the Governing Documents for product quality and acceptability and that flowers must meet those standards in order to be purchased by APC.

3. Members are allowed the use of the APC logo on their farm advertising materials; website, business cards and letterhead.

4. If I am delinquent in equity payments or other financial obligations to the APC, I may have member benefits suspended and will be considered as a member "not in good standing".

5. APC policies may be changed by the Board of Directors as the need arises in accordance with the governing documents.

6. Upon 45 days of notice, I may apply to the Board of Directors to terminate my membership with APC. Any funds owed the member will be returned per the APC Bylaws pertaining to Membership Termination minus any outstanding obligations. Memberships are not transferable to a third party.

7. I authorize the APC Board, at its sole discretion, to recoup, offset, or set off any amount I owe to the APC, including any compounded interest and late payment fees, by reducing the amount of any patronage refunds, dividends, or similar amounts retired and paid to me, regardless of any statute of limitation or other time limitation.

8. The APC, its Board, and Executive Director have disclosed potential risks associated with the formation of the APC, and I understand that my membership fee will not be returned.

9. I agree to fully pay the equity capital required for membership in the APC and to pay all current and future dues and fees for services the APC agrees to provide me. The initial membership fee may be paid by one of two methods: 1) The full amount ($750) at the time of signing this agreement or 2) $450 at the time of signing this agreement and an installment of $150 on the first and second anniversary of this agreement for a total of $750. Option 2 will provide all membership rights except the member will not be able to market flowers through APC until the membership fee is paid in full.

10. I agree to pay the APC for its damages, costs, and expenses, including attorney fees and legal expenses, caused by or associated with my failure to: (a) pay any amount charged or assessed by the APC; (b) comply with the Governing Documents; or (c) provide the APC with truthful, accurate, and complete information.

11. The terms of this Membership Agreement may be modified or amended by action of the Board of Directors. Members shall be informed of any and all changes. The modifications or amendments shall apply prospectively from the date of the amendment or modification forward, but the modifications or amendments will not apply retroactively if retroactive application prejudices the Member.

12. I agree that this Membership Agreement is governed by and interpreted under the laws of the State of Alaska.

13. I understand that any patronage refunds or certificates of per-unit retained earnings are taxable income for which I am required to file on my federal tax return.

14. I agree that I shall keep confidential and not disclose APC confidential information to non-cooperative sources unless approved by the APC Board of Directors. This confidential information may include information on contracts, marketing agreements, business strategies and production rates or as determined in the Governing Documents.

15. I will keep a copy of this Membership Agreement and of the Governing Documents (when approved by the Board of Directors) for my records.
Bylaws Example: Alaska Peony Cooperative

https://alaskapeonycooperative.com/APC_Bylaws.pdf
Establishing as a Nonprofit

- Heather Griffiths
- 501(c)3
Website

Heather Griffiths purchased the URL: utahflowerfarms.com
Potential Positions & Recruitment

- President
- Vice president
- Treasurer
- Secretary
- Newsletter editor
- Publicity
- Research
- Education
Publicity

• Instagram
  • Having a farmer use the IG feed for a week or more to highlight their farm,
  • Need 1-2 people to manage the feed, build a following, highlight slow flower issues, etc.
  • **Use the hashtag #utahflowerfarms that is already existing**? Or start new?

• Facebook?

• What news outlets, publications, TV shows, can we appeal to who might want to cover this story?
  • Punk Rock Farmer (radio)
  • Fox This Place (tv)
  • City Weekly
  • Salt Lake Tribune
  • Sugarhouse Journal
  • UPR (radio)
  • Maria is writing an article.
Timeline for going public...
Thank you for a great First Annual Cut Flowers Session!

Dr. Melanie Stock
Assistant Professor / Urban & Small Farms Extension Specialist
Email: melanie.stock@usu.edu
Phone: 435-797-0248